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(54) Method of image coding and decoding

(57) A method of simplifying the arithmetic operation in a global motion compensation process approximates the motion vector field of the whole image without using many parameters. Motion vectors in the global motion compensation are found by the interpolation and/or extrapolation of the motion vectors of a plurality of representative points 602, 603 and 604 having particular features in the spatial distance thereof. Since a shift operation can substitute the division for synthesizing a predicted image of global motion compensation, the processing using a computer or a dedicated hardware is simplified.

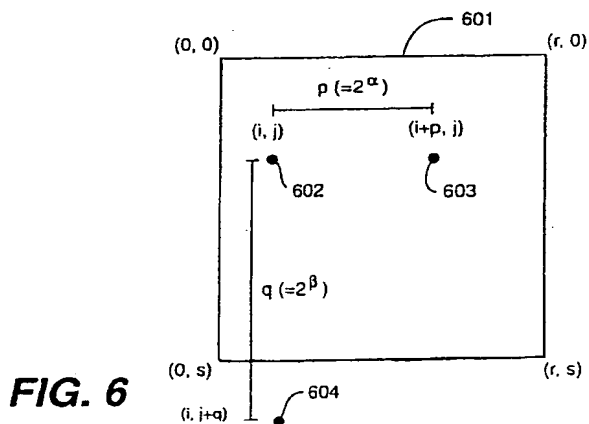


FIG. 6

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EUROPEAN SEARCH REPORT

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EP 97 10 4595

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 607, 31 July 1996 (1996-07-31) & JP 08 065675 A (HITACHI LTD), 8 March 1996 (1996-03-08) * abstract *	2-6, 13-17	H04N7/36 H04N7/26 H04N7/50
A	& US 5 684 538 A (KIMURA JUNICHI ET AL) 4 November 1997 (1997-11-04) * column 6, line 50 - column 7, line 58 * * column 14, line 15 - column 15, line 65 * * figures 12,13 *	1,7-12, 18-25	
A	WO 92 03799 A (TELEVERKET) 5 March 1992 (1992-03-05) * page 3, line 11 - page 4, line 16 * * figure 3 *	1-25	
A	EP 0 632 657 A (NOKIA OY AB) 4 January 1995 (1995-01-04) * column 7, line 47 - column 8, line 19 * * figures 7,8 *	1-25	TECHNICAL FIELDS SEARCHED (Int.Cl.6) H04N
A	EP 0 196 825 A (RCA CORP) 8 October 1986 (1986-10-08) * column 3, line 37 - column 7, line 51 * * figures 1,2 *	1-25	
A	EP 0 689 359 A (SAMSUNG ELECTRONICS CO LTD) 27 December 1995 (1995-12-27) * page 6, line 28 - page 8, line 52 * * figure 3 *	1-25	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 30 September 1999	Examiner Fassnacht, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 82 (P4/C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 10 4595

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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30-09-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 08065675 A	08-03-1996	US 5684538 A	04-11-1997
WO 9203799 A	05-03-1992	SE 465394 B	02-09-1991
		DE 69129031 D	09-04-1998
		DE 69129031 T	25-06-1998
		EP 0543915 A	02-06-1993
		JP 6500212 T	06-01-1994
		SE 9002647 A	02-09-1991
		US 5617482 A	01-04-1997
EP 0632657 A	04-01-1995	FI 932520 A	03-12-1994
		DE 69415731 D	18-02-1999
		DE 69415731 T	22-07-1999
EP 0196825 A	08-10-1986	US 4727506 A	23-02-1988
		AT 72078 T	15-02-1992
		AU 578352 B	20-10-1988
		AU 5481086 A	02-10-1986
		CA 1245345 A	22-11-1988
		CN 1008583 B	27-06-1990
		DE 3683518 A	05-03-1992
		DK 134886 A	26-09-1986
		FI 861122 A, B,	26-09-1986
		HK 11497 A	05-02-1997
		JP 2070851 C	10-07-1996
		JP 7092743 B	09-10-1995
		JP 61224573 A	06-10-1986
		KR 9511821 B	10-10-1995
		SG 179394 G	12-05-1995
EP 0689359 A	27-12-1995	KR 148154 B	15-09-1998
		CN 1115953 A	31-01-1996
		JP 2801559 B	21-09-1998
		JP 8070460 A	12-03-1996
		US 5657087 A	12-08-1997